Report to the Legislature

Reducing Unnecessary Emergency Department Use

As Required by Engrossed Substitute Senate Bill 5930 Sec 14

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Executive Summary

In May, 2007, Engrossed Substitute Senate Bill 5930 was approved as part of legislation resulting from the Governor's Blue Ribbon Commission. This report is in response to the legislative requirement outlined in Section 14. The intent is to provide information on unnecessary emergency department (ED) use by enrollees in state purchased health care programs and to provide additional insight on the uninsured's use of ED services. Five major population groups were considered: Fee-For-Service (FFS) Medical Assistance clients; Managed care population eligible for medical assistance services through a network of managed care contractors; Health Care Authority (HCA) enrollees receiving services through the Uniform Medical Plan (UMP), HCA Basic Health Plan (BHP), managed care enrollees, and the uninsured population as captured by a sample of hospitals representing the Washington State Hospital Association (WSHA).

The work group for this report included representatives from the Department of Social and Health Services: Health and Recovery Services Administration (HRSA) and Research and Data Analysis Divisions; the Health Care Authority (HCA), and includes input from the Washington State Hospital Association (WSHA), Washington Association of Community and Migrant Health Centers (WACMHC) and data contributed by Healthy Options Plans.

A review of pertinent literature indicates the following:

- **a.** The Centers for Disease Control reports a 31% increase in ED visits per facility from 1995 through 2005. ED visits have grown 20% from 96.5 million in 1995 to 115.3 million in 2005.[42]
- **b.** Emergency department services are being used for non-emergent or otherwise primary care treatable services. [4,8,10,15,18,21,28,35,49,61]
- **c.** Dental disorders for the Medicaid and uninsured population issues have been a problem due to lack of access to outpatient dental care.[29, 42]
- **d.** Complex issues are driving ED trends, not only in this state but across the nation. These issues include: a lack of primary care providers; decisions by patients to seek more immediate services rather than consult with their primary care provider before accessing the ED; mentally ill and substance abusing patients using EDs as their medical home; patients using the emergency room to secure controlled substances; lack of incentives for primary care health delivery; and a lack of disincentives for patients to use ED services for non-emergent situations. [2,3,4,6,8,10,14,15,26,27,32]
- **e.** Strategies that seem most promising are comprehensive, coordinated and community based.[17,18]

A coordinated data selection and analyses approach was used by HCA, HRSA, and WSHA on each of their ED data sets, applying the Emergency Department Classification Algorithm model developed by New York University (NYU) Center for Health and Public Service Research. This model classified ED visits into four major categories: (1) non-emergent, (2) emergent/primary care treatable, (3) emergent/ED care needed – preventable/avoidable, and (4) emergent/ED care need – not preventable/avoidable. For the purpose of this report, it was important to use a standardized method that provided a matrix of major categories typically associated with ED use. While the model is not perfect and has certain limitations, we were unable to identify another validated tool that would assist in classifying ED visits in a way to help identify emergent from non-

emergent care. The NYU model is not intended as a triage tool or a mechanism to determine access issues.

The Uniform Medical Plan (UMP) had 14.2 visits per 100 in 2006 and Basic Health Plan (BHP) carriers (excluding Columbia United Providers) had 38.2 visits per 100. According to the Centers for Disease Control, the 2005 national rate for privately insured persons was 23.8 visits per 100.[42] This national benchmark is appropriate for UMP; however, BHP has no comparable benchmark.

When examining ED visits in the context of the NYU classification model, UMP and BHP carriers both experienced a sizeable volume of visits with the primary classification of non-emergent or emergent treatable through primary care (39.6% and 44.9%, respectively). Upon closer inspection of the top twenty diagnoses by volume for UMP and BHP, the largest grouping of diagnoses included in the non-emergent and treatable through primary care was common childhood infections, such as urinary tract infections, sore throat, and inner ear infections. This finding suggests that families may lack adequate access to primary care, lack of sufficient health education, or are not willing to take the risks of a "wait and see" approach, or some combination of these factors.

Additionally, the top twenty diagnoses by volume for UMP and BHP suggest that many enrollees are accessing ED services for complaints of pain (25% and 42%, respectively). Further inspection of the 2006 visit frequency revealed that 96.4% of UMP enrollees had only 1 or 2 visits and 76% of BHP enrollees had only 1 or 2 visits. Acknowledging that there are very legitimate reasons to access the ED for pain issues, this finding may warrant further exploration.

The Health and Recovery Services Administration (HRSA)'s fee-for-service clients had 55.7 visits per 100 and the managed care clients had 53.9 visits per 100 as compared to the national Medicaid average of 89.4 visits per 100. Approximately 50% of ED visits were categorized as non-emergent, emergent but primary care treatable avoidable or preventable. Of the top twenty diagnoses for ED utilization, the largest groupings for FFS clients were: acute urinary tract infection, headache and lumbago. For the managed care clients, the largest grouping of the top twenty diagnoses for non-emergent, emergent treatable through primary care, were: fever, upper respiratory infections and ear infections. It is important to note that HRSA has a larger proportionate of children in their program as compared to HCA's population, particularly as younger children have higher ED utilization rate.

Washington State Hospital Association's (WSHA) ED data found that the distribution of non-emergent ED visits is similar among Medicaid and privately insured patients, with young children being the most frequent users of the ED for non-emergent services. 48.2% of the ED visits were categorized as non-emergent, emergent but primary care treatable avoidable or preventable. WSHA found a high degree of similarity across payers, but dental disorders and general medical exam not specified were in the top twenty reasons for ED visits among the Medicaid and uninsured population and not among the top twenty reasons for ED visits for the commercial group.

A WSHA survey of five metropolitan hospitals' ED managers found they continue to have significant challenges in keeping up with the demand for services and finding ways to effectively deal with ED overuse by patients with dual diagnoses of mental health and substance abuse problems. State and national data show that higher ED use in this population and excessive use (i.e., greater than 31 ED visits/year) correlates with having a dual diagnosis and receiving narcotics in the ED.[33] Working with the community, the Department of Health and prescribers will be necessary to developing "best practices" to address these complex issues.

Both public and private entities recognize the need to reduce inappropriate use of ED services and improve the care of patients and have already partnered with the state on innovative approaches. These approaches range from using case management and care coordination model to extending after-hours care in clinics to education and outreach efforts to both providers and patients. The state and private providers are already engaged in successful partnerships to reduce unnecessary ED use.

Clearly evident is that the issues and solutions to reduce inappropriate ED utilization is very complex. People use the ED for a variety of reasons. There are also health care system issues that need to be addressed in the development of strategies. Interventions must be comprehensive, coordinated, and address the unique needs of targeted populations and the community. There is no one single strategy or solution that can be effective in reducing inappropriate ED use. In addition, across payer comparisons, for those contributing to this report will require further analysis to account for differences in age, gender and disability characteristics.

Introduction

The recently enacted ESSB 5930 required the Department of Social and Health Services (DSHS) and the Health Care Authority (HCA) to provide information on unnecessary emergency department (ED) use by enrollees in state purchased health care programs and to provide additional insight on the uninsured's use of ED services. Five major population service groups were considered: Fee-for-Service (FFS) Medical Assistance clients; Managed Care population eligible for medical assistance services through a network of managed care contractors; Health Care Authority enrollees receiving services through the Uniform Medical Plan and Basic Health managed care plans, and the uninsured population as captured through the Washington State Hospital Association (WSHA).

This report was developed in coordination with the Washington State Hospital Association; Community Health Clinic Association; data contributed by Healthy Options managed care organizations and the DSHS Research and Data Analysis Division.

For this report, the following activities were conducted:

1. A comprehensive review of the literature.
2. Agreement to use the Emergency Department Classification Algorithm model developed by New York University (NYU) Center for Health and Public Service Research. This model assists in classification of selected portion of ED services into the four separate ED visit utilization patterns based on the model: (1) non-emergent, (2) emergent but primary care treatable, (3) emergent care needed but preventable or avoidable and finally (4) emergent care needed that was not preventable or avoidable. The use of a standard model was essential in providing consistency in how the data was reviewed and analyzed. Although there are flaws within the model, at this time, there is no better method of categorizing ED visits.
3. Coordinated data gathering with HRSA, HCA and the Washington State Hospital Association and use of the NYU ED model. The methods were used to provide a detailed examination of 2006 ED use across agencies.
4. Identify the unique impact of uninsured clients in the Washington hospital experience to achieve a better understanding of uninsured ED use trends.
5. Identify a set of current initiatives or best practices that are most likely to generate positive results and potential savings from local communities or managed care plans.
6. Generate potential solutions that have been aligned with:
    a) creating improved access;
    b) creating some client disincentives for unnecessary ED use; and
    c) expanding both medical provider and client education and promoting better utilization review opportunities.

Current Trends in Emergency Department Use

National Trends

The use of emergency departments (ED) in the United States continues to rise. A recent poll by the American College of Emergency Physicians, of approximately 1500 practicing emergency physicians, indicated that more than 80% felt that crowded conditions in their ED had increased in the past year. Top concerns included boarding patients and long waits.[5]

The most current (2005) nationally representative data from the Centers for Disease Control (CDC) indicates a 31% increase in ED visits per facility since 1995. EDs visits have grown 20% from 96.5 million in 1995 to 115.3 million in 2005. During this same time period, the utilization rate (visits per 100 persons) increased by 7%.[42]

Increasing ED use for non-emergency services is a significant component of over-crowed EDs. Non-emergency use of the EDs increases health care costs, and creates a lack of coordination and continuity of health care for patients. EDs are now considered the largest providers of primary care services. A literature review indicates numerous studies found that non-emergency visits compose about 50 % of ED visits.[8,10,15,17,21,22,28,32,36,49] This means patients could have been seen in a less costly and more appropriate setting, such as a primary care provider office.

Several studies and reports have indicated that one of the primary reasons cited for using the ED both by users and ED physicians, is not as a “last resort”, but due to the lack of adequate or accessible primary care providers, particularly outside business hours or inability to obtain same day or next day appointments; dissatisfaction with other sources of care; and lack of preventative services for asthmatic children. There is also a positive attitude or perception towards ED associated with easy access to physicians, easy access to diagnostic testing, higher quality of care, easier access to specialists and convenience of immediate availability.[8,27,47]

Use of EDs for primary care services or non-emergent care crosses all economic lines. The highest per capita ED visit rate was among children under 12 months of age (91.3 per 100). Among middle and upper middle class families, ED use was greater among children under 6 years of age, with the majority of those visits deemed non-emergency visits by health professionals. Insured Americans accounted for most of the increase in ED visits and the CDC found that private insurance was the most frequent source of payment, accounting for 39.9% of ED visits.

Although Medicaid patients showed a slightly lower rate of increase in ED use than insured patients, high ED users were more likely to have Medicaid, with Medicaid patients having the highest annual rate of ED visits (89.41 visits/100 Medicaid enrollees), nearly four times the rate for people with private insurance and twice the rate for the uninsured.[15,17,18,30,31,42,47]

The uninsured increasingly rely on EDs as their principal provider of care.[63] In 2005, the uninsured had 45.9 visits per 100 uninsured persons, while privately insured persons had 23.8 per 100 with private insurance.[42] The uninsured also tend to delay seeking care until their condition is worse, more complicated to treat, and therefore more costly.

Another major issue facing EDs is the increasing treatment for abuse of prescription or over the counter drugs. The Substance Abuse and Mental Health Services Administration (SAMHSA) has found that the percentage involving non-medical use of pharmaceuticals rose 21% between 2004 and 2005. Most commonly abused were benzodiazepines or anti-anxiety drugs, up 19%; prescription pain relievers, up 21%; and oral methadone, up 29%. About one third of all drug- related ED visits involved alcohol in

combination with other drugs or alcohol alone for patients less than 21 years of age.[52] Chronic illicit drug use has been shown to be a positive determinant of the probability of using an ED for medical treatment. Chronic illicit drug users will use an ED 30% more compared to their casual or non drug using counterparts.[37,52] The CDC found that the leading therapeutic drug classes mentioned during ED visits were narcotic analgesics, nonsteriodal anti-inflammatory drugs and narcotic analgesics.[42]

A review of Washington State's foster care system found that contrary to findings in the general pediatric sample, psychiatric conditions were the strongest predictors of ED use, followed by some chronic health problems. Children diagnosed with personality disorders or depression was 9.5 and 5.4 times more likely to be seen in the ED than children without psychiatric diagnoses.[1]

Emergency departments see more than 2 million people whose principal complaint was "symptoms referable to psychological/mental disorders in 2002". After assessment and diagnosis, more than 3 million people were discharged with a primary finding of "psychological/mental disorder". This constitutes only 3 -4% of all visitors to the ED, the increasing rate is adding to the strain of overcrowded EDs and many EDs are feeling overwhelmed with the influx of psychiatric patients.[22,25]

In addition to medical care, patients frequent the ER seeking dental care. The University of Washington's 2003 study found that from 1997 to 2000 an average of 738,000 ED visits per year was for tooth pain or injury. The visits were most common among those 18 to 35 years of age. Their research indicated that 44% of Americans lack dental insurance. Emergency departments are poorly prepared to deal with dental problems and can only provide temporary care.[29]

Many primary ED diagnoses are related to chronic conditions. National trend shows an overall decrease of ED visits for a chronic condition by 10% since 1995, with the exception of a significant increase in the percentage of ED visits related to hypertension and depression.[42]

Strategies

The majority of studies and reports identified patient characteristics and system related factors that impact the use of EDs. However, some studies did look at the strategies and outcomes for reducing non-emergent ED utilization.

In a pilot project ED physicians had web-based access to Blue Cross Blue Shield patient's utilization information on the care their patient received. The information allowed nurses to triage patients and guide patient towards more effective care. Often patients omit relevant information, such as recent ED visits for the same or similar diagnosis. Having more complete medical and utilization history allowed the physicians to treat the patient more effectively and appropriately.[6]

One study found that that an enhanced 24/7 scheduling system for follow-up with an ED uninsured population resulted in decrease in ED use. Patients were assigned to a family medical home through a web-based site referral system which allowed timely appointments. Since many patients visited the ED after hours, obtaining appointments with a primary care provider was difficult.[39]

A Medicaid pediatric pilot ED diversion program, which provided extended office hours, multiple access locations and care coordination, resulted in a reduction of ED visits. The intervention group visited the ED 8 times less than the control group.[62]

Other studies found that inadequate literacy was associated with higher hospital and ED use. Social support services were a positive influence in the appropriate use of outpatient services.[3,6,7,64]

Other studies and reports have indicated positive effects of managed care, gate keeping designs, and access to a primary health care provider in reducing inappropriate ED use.[1,26,39,46,56,63,65]

New York University Model

Service delivery and categorization of ED services is complex. Data extracts were provided in past reports. However for this report the work group wanted to use a standardized model that provided a matrix of major categories typically associated with ED use. While the model is not perfect and has certain limitations, we were unable to identify another validated tool that would assist in classifying ED visits in a way to help distinguish emergent from non emergent care.

With support from the Commonwealth Fund, the Robert Wood Johnson Foundation, and the United Hospital Fund of New York, the NYU Center for Health and Public Service Research developed an algorithm to help classify ED utilization. The Center for Health and Public Services Research provides additional information on the model: http://wagner.nyu.edu/chpsr/index.html.[11]

The algorithm was developed with the advice of a panel of ED and primary care physicians, and it is based on an examination of a sample of almost 6,000 full ED records. Data abstracted from these records included the initial complaint, presenting symptoms, vital signs, medical history, age, gender, diagnoses, procedures performed, and resources used in the ED. Based on this information, each case was classified into one of the following categories:

- Non-emergent. The patient's initial complaint, presenting symptoms, vital signs, medical history, and age indicated that immediate medical care was not required within 12 hours.
- Emergent/Primary Care Treatable. Based on information in the record, treatment was required within 12 hours, but care could have been provided effectively and safely in a primary care setting. The complaint did not require continuous observation, and no procedures were performed or resources used that are not available in a primary care setting (e.g., CAT scan or certain lab tests).
- Emergent - ED Care Needed - Preventable/Avoidable. Emergency department care was required based on the complaint or procedures performed/resources used, but the emergent nature of the condition was potentially preventable/avoidable if timely and effective ambulatory care had been received during the episode of illness (e.g., the flare-ups of asthma, diabetes, congestive heart failure, etc.).
- Emergent - ED Care Needed - Not Preventable/Avoidable. Emergency department care was required and ambulatory care treatment could not have prevented the condition (e.g., trauma, appendicitis, myocardial infarction, etc.).
- Other. No attempts in this model were made to classify cases with a primary diagnosis of injury, mental health, or several other major categories.

The information that was used to develop the algorithm required analysis of the full medical record. Since such detailed information is not generally available on computerized ED or claims records, these classifications were then "mapped" to the discharge diagnosis of each case in the NYU sample to determine for each diagnosis the percentage of sample cases that fell into these first four categories. For example, patients discharged with a final diagnosis of "abdominal pain" may include both patients

who arrived at the ED complaining of stomach pain, as well as those who reported chest pain (and a possible heart attack). Accordingly, for abdominal pain, the algorithm assigns a specific percentage of the visit into the categories of "non-emergent", emergent/primary care treatable", and "emergent/ED care needed-not preventable/avoidable" based on what was observed in the sample for cases with an ultimate discharge diagnosis of abdominal pain.

It is important to recognize that the algorithm is not intended as a triage tool or a mechanism to determine whether ED use in a specific case is "appropriate" (e.g., for reimbursement purposes). Since few diagnostic categories are clear-cut in all cases, the algorithm assigns cases probabilistically on a percentage basis, reflecting this potential uncertainty and variation.

It is also important to note that the algorithm makes no attempt to classify a significant number of cases, including those with injury. The algorithm pulls out as separate unclassified cases, i.e., those with a primary diagnosis of injury, mental health problems, alcohol, or substance abuse. Accordingly, these cases are not part of the standard classification scheme, and these cases are tabulated separately. There was a residual of conditions (approximately 15%) where the NYU sample was not of sufficient size to assign percentages for the standard classification. These conditions are also tabulated separately.

Washington State Trends

This section of the report aggregates information from Health Care Authority (UMP and BHP), Medicaid (fee-for-service and managed care), and the Washington State Hospital Association. Summary data is presented to show the similarities and differences between the various populations. Due to limitations of the model and the varying characteristics of the payers and populations, the reader is referred to Attachments A, B, C, & D for additional analysis. The results of the analyses across payers using the NYU model for ED visit classification are shown in Table 1.

Table 1

CY 2006 WA State ER Visits by Payer Type and Algorithm Category

Payer Type	Nonemergent	Emergent, Primary Care Treatable	Emergent ED Care Needed, Preventable/Avoidable	Emergent ED Care Needed, Not Preventable/Avoidable	Injury	Mental Health Related	Alcohol Related	Substance Abuse Related	Unclassified
Medicaid FFS	22.7%	22.3%	6.9%	10.5%	20.6%	4.3%	1.4%	0.6%	10.6%
Medicaid Managed Care	25.9%	25.9%	5.9%	9.4%	24.4%	1.0%	0.2%	0.1%	7.3%
Basic Health Plan	21.1%	23.8%	5.4%	15.4%	22.4%	2.3%	1.0%	0.2%	8.3%
Uniform Medical Plan	18.7%	20.8%	4.7%	14.0%	31.7%	1.9%	0.5%	0.1%	7.5%
Selfpay/Uninsured/ Charity	20.8%	20.5%	6.9%	9.1%	27.2%	2.7%	2.5%	0.7%	9.5%
Total	22.7%	23.4%	5.5%	12.6%	24.0%	2.3%	0.9%	0.3%	8.3%

Note: Further analysis will be needed for information in Table 1 for cross payer comparisons to account for differences in age, gender and disability status within respective populations

Figure 1 presents the data in a graphic perspective and shows that overall, non-emergent (22.7%) and emergent primary care treatable (23.4%) account for about 46% of ER visits for CY 2006. In addition, categories are established for injuries, mental health related, alcohol related, and substance abuse related. Together these equal about 27%. Further discussion and additional review of members representing these areas are needed to develop strategies for these sub-populations.

Figure 1

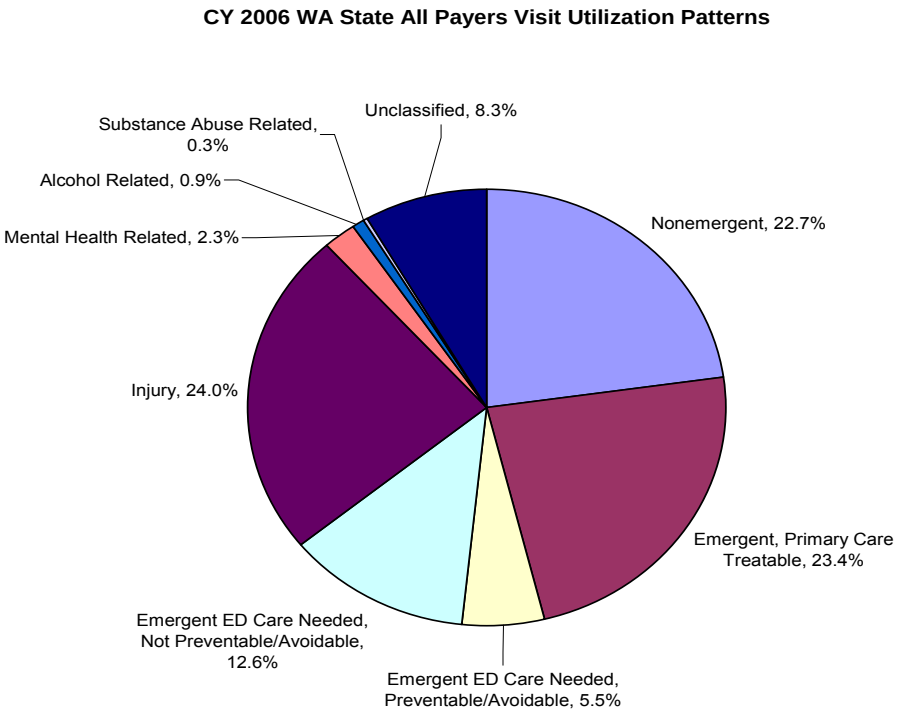
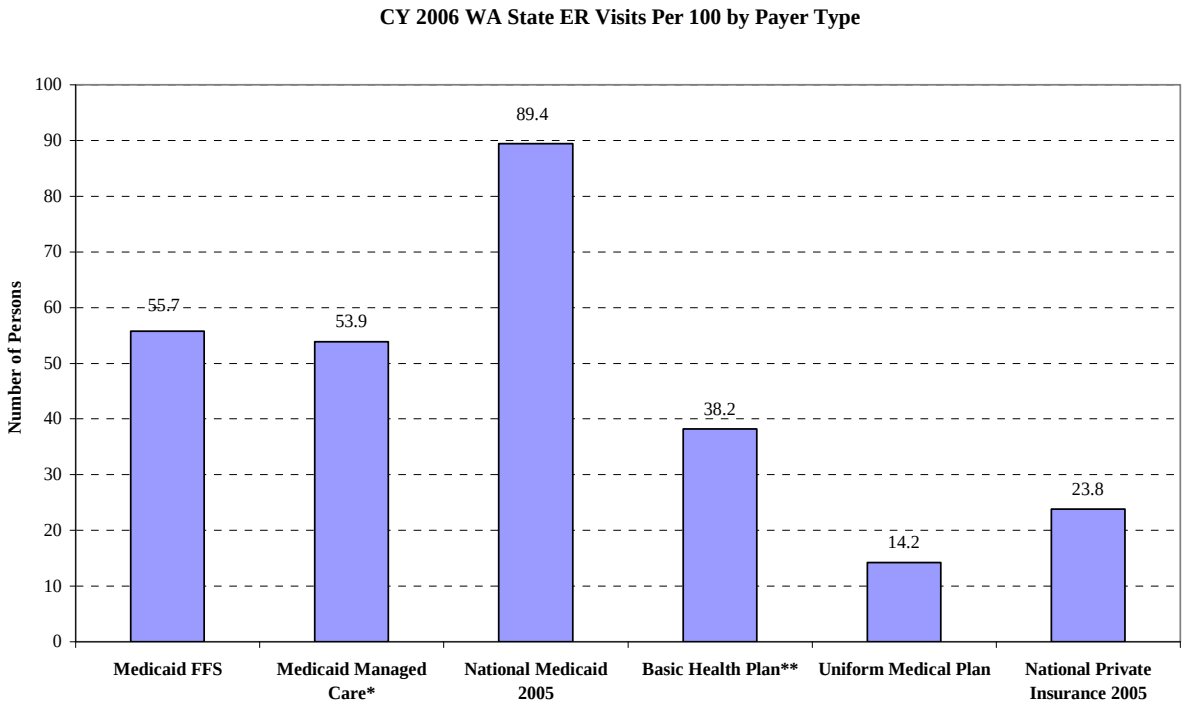


Figure 2 illustrates the ED rate per 100 enrollees by respective payer. HRSA's ED visit pattern per 100 for fee-for-service and managed care are well below the national Medicaid average for 2005.[42]. When compared to the 2005 national rate for privately insured persons (23.8 per 100), UMP had substantially fewer ED visits per capita. BHP does not have an appropriate benchmark for comparison because it is neither truly commercial nor Medicaid, but the reader can get a sense of the ED utilization relative to enrollment.

Figure 2



** Medicaid managed care plans include Molina, CHPW, Group Health, and Regence BlueShield.*
*** Basic Health Plan includes Molina, CHPW, Group Health, and Kaiser.*

Health Care Authority - Population Demographics

In 2006, the enrollment breakdown by age among the Uniform Medical Plan (UMP) members showed that children age 0-17 accounted for approximately 21%, adults aged 18-64 account for 76%, and seniors aged 65 and over comprise less than 3% (see Table 2).

In 2006, the enrollment breakdown by age among BHP carriers showed that children aged 0-17 comprise approximately 10%, adults aged 18-64 account for nearly 89%, and elders aged 65 and over account for slightly more than 1%. Among the adults aged 18-64, approximately 62% are female (see Table 2).

Health and Recovery Services Administration – Population Demographics

In 2006, there were 897,511 Medicaid fee-for-service (FFS) eligible members. Children age 0-17 years accounted for 36.2%, adults aged 18-64 accounted for 48%, and elders aged 65 and older accounted for 15% of the FFS population. For the Medicaid managed care, there were 690,000 enrollees. The Medicaid managed care enrollment breakdown by aged showed that children (0-17 years) accounted for around 72% of the total enrollees, with adults (18-64) accounting for 25.4% and the elder (65 and older) accounting for only 3% of the managed care population (see Table 2).

Table 2 – 2006 Enrollment

Plan Name	Total Enrollees	Children (0-17)	Adults (18-64)	Elders (65 +)
UMP*	133,778	28,227 (21.1%)	101,671 (76%)	3,880 (2.9%)
BHP**	97,326	9,733 (10%)	86,425 (88.8%)	1,168 (1.2%
HRSA - FFS	897,511	324,369 (36.2%)	437,473 (48%)	135,669 (15%)
HRSA - MC	690,000	496,361 (72%)	175,186 (25.4%)	18,649 (3%)

*** UMP non-Medicare population**
**** BHP enrollment excludes Columbia United Providers**

Health Care Authority ED Utilization Patterns

UMP had 14.2 visits per 100 in 2006 and BHP carriers (excluding Columbia United Providers) had 38.2 visits per 100. According to the Centers for Disease Control, the 2005 national rate for privately insured persons was 23.8 visits per 100.[42] While the national rate for privately insured person serves as an excellent benchmark for UMP, BHP does not have a comparable benchmark because it is neither truly a commercial product nor Medicaid.

When examining ED visits in the context of the NYU classification model, UMP and BHP carriers both experienced a sizeable volume of visits with the primary classification of non-emergent or emergent treatable through primary care (39.6% and 44.9%, respectively). Upon closer inspection of the top twenty diagnoses by volume for UMP and BHP, the largest grouping of diagnoses included in the non-emergent and treatable through primary care was common childhood infections, such as urinary tract infections, sore throat, and inner ear infections. This finding suggests that families may lack adequate access to primary care, lack of sufficient health education, are not willing to take the risks of a "wait and see" approach, or some combination of these factors.

Additionally, the top twenty diagnoses by volume for UMP and BHP suggest that many enrollees are accessing ED services for complaints of pain (25% and 42%, respectively). Further inspection of the 2006 visit frequency revealed that 96.4% of UMP enrollees had only 1 or 2 visits and 76% of BHP enrollees had only 1 or 2 visits. Acknowledging that there are very legitimate reasons to access the ED for pain issues, this finding may warrant further exploration.

For more detailed analyses, please see Attachment A for UMP utilization and Attachment B for BHP utilization. These attachments provide tabular data displays and more in-depth interpretation.

Health and Recovery Services Administration ED Utilization Patterns

Medicaid Fee-for-Service and Managed Care

Application of the NYU model for Washington's fee for service (FFS) ED visits shows that approximately half (51.9%) were non emergent, emergent but primary care treatable or emergent in nature but avoidable or preventable. Emergency department utilization patterns for Medicaid's managed care population are slightly greater at 57.8%.

HRSA's fee-for-service clients had 55.7 visits per 100 and managed care clients had 53.9 visits per 100 as compared to the national Medicaid average of 89.4 visits per 100. Approximately 50% of ED visits were categorized as non-emergent, emergent but primary care treatable avoidable or preventable. The top diagnoses for ED utilization for FFS clients were acute urinary tract infection, headache and lumbago. For the HRSA managed care population, top diagnosis codes for ER visits are fever, urinary tract infection not otherwise specified and abdominal pain unspecified site. See Attachment C.

Washington State Hospital Association ED Utilization Patterns

The Washington State Hospital Association (WSHA) obtained ED data for calendar year 2006 from a sample of 23 Washington hospitals. There were no duplicative visits in the data. Each hospital's unique coding of elements, such as payer and discharge status was accounted for. The resulting data set had 596,232 visits.

The distribution of non-emergent ED visits is similar among Medicaid and privately insured patients. Among Medicaid patients and privately insured patients, most of the visits for non-emergent or emergent by avoidable or primary care treatable, were for young children. Forty-eight percent of the ED visits by the self pay/uninsured/charity group were categorized as non-emergent/primary care treatable/preventable avoidable. In reviewing the diagnosis by ED categories, there were similarities across payers. However, for both Medicaid and the uninsured patients, three disorders occur in the top twenty diagnoses for non-emergent or emergent but avoidable or primary care treatable, which aren't found in the top twenty diagnoses for the commercial population. These are two dental diagnoses and the general medical exam, not otherwise specified. This highlights the problems of access to dental care and potentially also to general primary care services

For more detailed findings from the analysis of WSHA, please see Attachment D.

Current Initiatives/Best Practices

Health Care Authority

HCA has been aggressively and creatively seeking ways to provide affordable, high quality health care to a greater number of Washingtonians. Recent successes include restraining premium increases for public employees and BHP enrollees to 3% and 5.3%, respectively, in 2008 and partnering with Puget Sound Health Alliance on measuring provider performance on health care quality standards.

HCA has used this study to gain perspective on ED utilization, and HCA is engaged in a number of efforts toward improving health care quality and affordability for HCA enrollees have a direct impact on member behavior. Several of these activities are described below.

Many commercial insurers use cost-sharing benefits designs for reducing unnecessary visits to the ED. The rationale is that the insured person will use more prudent judgment when they will have a level of financial responsibility when seeking medical care. The health plans available to public employees have a co-pay of $75 for accessing ED services when the ED visit does not result in an inpatient admission. This co-pay amount is on par with other health care purchasers across the country. Further, because of the preferred provider organization model of care, UMP enrollees are subject to pay 10% of the physician and other professional provider fees when using ED services. Enrollees in the BHP are subject to a $100 co-pay for accessing ED services when the ED visit does not result in an inpatient admission. However, further investigation would be required to determine the frequency of BHP enrollees paying this co-pay as opposed to a hospital writing off the charge to charity care.

Another strategy used by commercial health care purchasers to avoid unnecessary visits to the ED is disease management or case management programs. One of the purposes of these types of programs is to effectively control a disease state so that the insured does not have an exacerbation that warrants a visit to the ED. In the NYU model, this is referred to as an emergent, but avoidable visit.

UMP has recently initiated a disease management program for asthma and chronic obstructive pulmonary disease. The program provides one-on-one coaching with a trained, registered nurse, supplies such as an inhaler, spacer, and peak flow meter, a self-care handbook, and quarterly newsletters with useful tips and information. UMP also initiated an obesity case management program for those enrollees who are interested in pursuing bariatric surgery. In 2008, UMP will implement disease management programs for enrollees with diabetes, heart disease, and other chronic conditions.

One of the findings of the analysis is that injuries account for nearly a third of ED visits. Further analysis would be needed to determine the proportion of these injuries that are work-related. However, the State has worker safety programs in place at each State agency to address safety-related issues. Washington Administrative Code 296-800 directs each agency to provide a safe and healthy workplace free from recognized hazards. This may include, but not be limited to, ensuring that the physical space is free from hazards that may cause slips, trips, and falls; making sure that employees do not use equipment or tools that are unsafe; prohibiting alcohol and narcotics from the workplace; and directing agencies to establish and enforce rules that effectively keep the workspace safe.

HCA is engaged in a health literacy program through the Community Health Services division. A pilot project, based on a model from the UCLA Health Care Institute, is being developed to help families make more informed health care decisions about their child's health care needs. One goal of the project is to reduce use of the ED for conditions that can be treated through a primary care provider.

HCA is also engaged in a number of initiatives with the Health and Recovery Services Administration through contracts with managed care organizations that serve UMP and BHP. Many of these initiatives are described below.

Health and Recovery Services Administration

Over-utilization and unnecessary ED utilization by Medicaid clients is a significant concern, not only from a fiscal standpoint, but also because of the concerns around the lack of coordination and continuity of care when the ED is the primary setting for the client. As noted in many of the studies, much of the overt over-utilization can be seen as driven by socio-demographics of the population including issues of access to a primary care provider; on going medical and psychiatric care compliance; availability of transportation; inflexibility of a single-parent work schedules; unfamiliarity with the medical delivery systems; and language and/or cultural barriers. HRSA has implemented and expanded a number of programs in collaboration with the health care community. These programs focus on improving access, coordination, and management for targeted populations, which in turn has resulted in significant decrease in unnecessary ED use.

Patient Review and Coordination Program

The Patient Review and Coordination Program (formally called the Patient Review and Restriction Program) assist both fee-for-service (FFS) and managed care clients who need assistance in the appropriate use of medical services. Clients are often high ED users, inappropriately overuse services, have chronic conditions, and have co-occurring diagnoses of mental health and substance abuse. Clients who show patterns of inappropriate use of services, including high narcotic use, multiple prescribers, and high ED use are subject to specific restrictions of providers for up to 24 months. The program assigns and restricts clients to one primary care provider, one pharmacy, one narcotic prescriber and/or one hospital for non-emergent services.

Pre and post PRC placement analysis have shown significant client utilization changes:

- 33% reduction in ED visits
- 37% reduction in physician visits
- 24% reduction in the number of prescriptions

Currently there are about 3,000 FFS clients on the PRC program. Washington is only second to New York, which has the largest number (8,000) of restricted clients. Beginning January 2008 all contracted managed care plans will be required to have a PRC program.

Washington State Screening, Brief Intervention, Referral, and Treatment Project

Since April 2004 The Washington State Screening, Brief Intervention, Referral, and Treatment Project (WASBIRT) has placed chemical dependency counselors in nine hospital EDs in six counties around the state. These professionals provide universal substance use screening, brief interventions for those who show a moderate or high risk for substance use problems, and refer patients with substance use disorders for additional care. Each of the nine participating hospitals (Southwest Washington Medical Center, Providence St. Peter Hospital, Tacoma General Hospital, Allenmore Hospital, Harborview Medical Center, Providence Everett Medical Center, Yakima Regional Medical and Cardiac Center, Yakima Memorial Hospital and Toppenish Community Hospital) are impressed with its success and pleased to have additional resources in their hospitals. Additional hospitals around the state have expressed interest in the WASBIRT project.

Among patients who received at least a brief intervention, substance use reported in the six-month follow-up interview changed significantly compared to use reported at screening:

- 80% of 1,398 patients who drank alcohol reduced the number of days of drinking in the past 30 days, with the overall average declining from 10.4 to 5.3 days. The percent of patients reporting abstinence from alcohol in the past 30 days increased from 28% to 47%.
- 84% of 878 patients who reported drug use in the past 30 days reduced the number of days of use, with the overall average declining from 13.7 to 6.5 days. The percent of patients reporting abstinence from illegal drugs in the past 30 days increased from 55% to 71%.

Reductions in medical costs for patients who received at least a brief intervention were also substantial:

- The reduction in total Medicaid costs after receiving the brief intervention ranged from −$185 per member per month to −$192 per member per month, depending on the statistical model.
- Most of the Medicaid cost reductions were due to declines in the costs associated with inpatient hospitalizations from ED admissions.

Narcotics Review Project

In 2005, HRSA developed and implemented the initiative called the Narcotic Review Project. The Narcotic Review Project was a collaboration between state agencies and community partners to identify Medicaid clients who were high narcotic users and reduce excessive and unecessary narcotic prescriptions. The project identified the top 320 Medicaid narcotics utilizers, who received 10 or more narcotic prescriptions per month in a 12 month period. Data also revealed that ED “cycling” correlated with higher narcotic prescriptions. [33] The 320 group did not include clients with a diagnosis of cancer, clients

in a nursing home or clients receiving hospice services. The program focused on the following interventions:

- Educating health care professionals on opioid guidelines, pain management
- Using utlization health data to identify and target opportunites
- Sharing client prescription histories with providers
- Educating clients on risks of high narcotic use
- Informing clients and providers of availabe local and state resources
- Developing a web-based resource "toolkit" for providers
- Collaborating with medical and screening and treatment resouces in the community.

The results of the project over a 12 month period, included the following:

- A quarter of the "excessive" narcotic prescriptions were discontinued by the providers.
- Narcotic prescriptions for the 320 group decreased by 50%. The average number of narcotics for this group was 4 per month. After the interventions, the average number of narcotic prescriptions decreased to less than 2 per month.
- A decrease in ED use. The average number of ED visits for this group was 2 per month. After the interventions the average number of ED visits was less than 1 per month.

This project has received wide support from the health care community.

Opioid Guidelines for Non-Cancer Pain

Sponsored by the Washington State Agency Medical Directors, representing HRSA, HCA, UMP, Labor & Industries, and the Department of Corrections, the Opioid Guidelines for Non-Cancer Pain was developed by the Interagency Workgroup on Practice Guidelines in collaboration with actively practicing physicians who specialize in pain management. It is intended as a resource for primary care providers in prescribing opioids for adults in a safe and effective manager. The guidelines also assist primary care providers in treating patients who receive health care through state agency programs, whose morphine equivalent dose (MED) already exceeds 120 mg per day.

The Opioid Guidelines have been especially valuable as a resource for health care providers who are involved with PRC, WASBIRT, and the Narcotic Review Project.

Chronic Care Management

The Chronic Care Management Program (CCMP) grew out of the former Disease Management (DM) project, implemented in April 2002 as a result of a Legislative Directive. The DM project provided valuable experience about management of high risk clients that enabled HRSA to develop a more comprehensive program. Where the DM project provided education and care management services focused on a single disease state, the CCMP looks at the client not only in terms of his or her disease, but how the disease affects other physical or mental health issues the client may have. With the experience gained from the DM program, HRSA has been able to tailor a program that looks at the client as a whole person rather than focusing on a single disease.

In response to a 2006 Governor's directive, HRSA implemented the CCMP in January 2007. The program provides care management for high risk clients with multiple or complex needs and provides medical home support services for clients and providers. A predictive modeling methodology analyzes clients' historical use of medical services in order to predict future costs. HRSA has contracted with two vendors to provide CCM services both at the local level and statewide: The City of Seattle, Aging and Disability

Services (ADS) provides CCM services in King County and United Healthcare Services/Americhoice, provides CCM services statewide, excluding King County

Program for Assertive Community Treatment (PACT) Teams

The Mental Health Division (MHD) is working to decrease unnecessary ED use by implementing client diversion interventions and supporting increased community inpatient capacity. Diversion interventions include the implementation of a new evidence based program called Program for Assertive Community Treatment (PACT) for adults with severe and persistent mental illness. Using a team approach, PACT teams which include mental health and medical professionals bring treatment, rehabilitation, and support services directly to the client in the community. This may mean taking their services to a client who lives under a bridge. The focus is working collaboratively with the client to address the full range of their biopsychosocial needs. The PACT team approach has been shown to decrease client hospitalizations and retention in treatment. Evaluation of MHD's PACT program will include looking at the impact to ED use by the clients in the program. Additional evidenced based programs for children are being piloted.

Evaluation and Treatment Facilities

The Mental Health Division has supported the Regional Support Networks (RSN) development of non-hospital inpatient care facilities, licensed and certified as "evaluation and treatment" facilities, for persons who have been detained under the Washington State Involuntary Treatment Act. MHD's support has included technical assistance and the provision of capital and start up funding. Two new evaluation and treatment facilities for adults, with a total capacity of 32 clients, have opened in the past 24 months. Several additional facilities, including two for children, are being explored.

Managed Care Projects

Managed Care plans have been very active and involved in a number of initiatives to address the issue of increasing ED use. Their projects are sensitive to race, ethnicity, and cultural aspects of their community.

Community Health Plan (CHP)

In 2005 and 2006 Community Health Plan (CHP) completed both an ED utilization study and also employed the NYU Algorithm to their ED data to determine the characteristics and utilization patterns of their clients, in order to develop effective strategies to address the issue of increasing and inappropriate ED use.

Yakima Valley Farmworker's Clinic's Yakima Valley Kids Connect program

In partnership with the local health care community, children seen in the ED are connected with a community access specialist. The specialists link the child and family to a primary care provider, assist in making appointments and ensure they have access to state health insurance programs as appropriate. This approach has been success in other areas of the US and is showing promising outcomes in the Yakima area.

In addition, Yakima Valley Farmworkers Clinic has a dedicated staff person that partners with local hospital EDs to identify patients there for a preventative issue that could be more appropriately addressed in a CHC clinic setting. Staff schedule appointments at the clinic for these patients.

SeaMar and Interfaith Community Health Center, Bellingham

Coordinating with the local hospital, on a daily basis the medical service organization (MSO) follows up with patients who have visited the ED. This approach not only strengthens the concept of a medical home for the patient, but it provides the opportunity to identify and address issues that may not be known by the patient's primary care provider. Initial reports indicate a significant decrease in ED use by these clients.

SeaMar, Marysville

In coordination with the local hospital, SeaMar is informed of clients being seen in the ED for non-emergency needs. SeaMar follows up with unassigned clients with information about CHC resources. For established SeaMar clients, personal contact is made with the client and use of the open access scheduling system for same day appointments is encouraged.

Community Health Center La Clinca, Pasco

An urgent care clinic was opened in October, 2007, next to a local hospital. The hours of operation are 8am – 8pm Monday through Saturday. It is expected the clinic will divert up to 400 patients a month away from the ED for treatment that can be provided in a clinic setting.

Dental ED Diversion Project

Providence Centralia Hospital ED staff asks patients with non-emergency dental needs to fill out a contact information form, which is then faxed to Valley View Community Health Clinic to set up a follow-up dental appointment in the clinic.

Community Health Plan (CHP) Narcotic Utilization Study

CHP identified compelling links in certain targeted cohorts of patients between over-use of these potentially dangerous narcotic medications and excessive utilization of ED and other medical services. CHP found that a stronger-performing MSO also had very effective provider-to-provider communications.

Columbia United Providers (CUP)

Through extensive analysis of ED use and the impact of previous interventions, CUP recently made changes to their strategies and interventions. Members who are seen for non-emergency care are monitored and trended to determine effectiveness of interventions. Follow-up personal contact is made with these members and educational activities are part of the intervention. Continued high users are referred to the Medical Management staff for possible case management.

Hospital and Community Based Projects

Hospitals are attempting to reduce inappropriate ED among high users of ED services. Many hospital EDs significantly limit or do not prescribe certain narcotics to deter drug seeking behavior. Not performing medication refills has also been a way to decrease inappropriate ED use. Several hospitals are also working to educate patients about alternative community resources, such as community health clinics. Referrals to a primary care clinic or in some cases community health clinics occur at all of the EDs.

Consistent Care Program

Sacred Heart Medical Center in Spokane developed a community wide pilot project called "Consistent Care" to reduce ED visits by patients who use the ED frequently. The program uses an RN case manager to review the medical history of each frequent ED user with the patient's physician and with a committee of medical professionals to produce guidelines for treating the patient consistently with they return to the ED. These ED Care Guidelines are easily retrievable from an electronic medical record that is linked to all four Spokane hospitals and over 25 surrounding hospitals. Having access to the patient's medical records provides the emergency physician with the larger utilization picture and allows for more appropriate and consistent care at each ED visit. The model used by Consistent Care relies upon providing emergency departments with the ED Care Guidelines of frequent ED users and could be easily expanded across the state using web-based technology.

The Consistent Care program has been successful in reducing return visits by frequent ED users. ED use by the 40 patients enrolled in the program decreased by 50% in the first nine months with 763 fewer visits made to Spokane and surrounding area EDs. Data analysis performed in cooperation with DSHS showed a $34,000 savings in overall Medicaid expenditures for the 40 enrollees in the first 60 days the program operated.

Consistent Care staff estimate that over one million dollars a year could be saved on Medicaid expenditures for unnecessary ED services if the Consistent Care program is expanded to cover all patients in Spokane. The Consistent Care Pilot Program has stopped enrolling new patients while they work to form a public-private partnership to fund the program with Spokane hospitals, Washington Medicaid and private insurers.

Harborview Medical Center: Emergency Department High User Program

Harborview Medical Center (HMC) ED goal is to connect patients with the appropriate level of care in the community including primary care and reduce the overuse of the Emergency Department.

The vast majority of HMC ED high users have multiple problems including; mental illness, substance abuse and dependence and chronic and acute medical issues.

HMC ED has developed a number of strategies to meet their goals:

- Provide eligibility screening and assist patient to apply for Medicaid to improve access to mental health care in the community [45 in 2007].
- Develop “Care Plans” for patients that include coordination with community providers and improve mental health, chemical dependency and primary care access. Harborview Emergency Department has over 300 Care Plans [electronic-based] which have shown a 40% reduction in ED utilization after implementation.
- Develop a “Care Review” process. Care Review process developed to intervene with patients for whom a Care Plan has not been effective. This includes pulling together community providers together for a meeting to formulate plans to improve the patient’s care and reduce ED utilization. Study of 32 of these individuals showed a 60% reduction in visits after a Care Review process.
- Particular focus on chemical dependency patients by Chemical Dependency Professional from King County Mental Health Chemical Abuse and Dependency Services who is stationed in the ED. Improves access to Medical Detox, the Sobering Center and Involuntary Treatment and coordinates patient plans through the High Utilizer Workgroup.

- WASBIRT Chemical Dependency Professionals stationed in the ED provide screening for chemical abuse and dependence and brief intervention for those who score high in the screen. Outpatient follow-up is also available for patients in need.
- An HMC ED Triage provider who can quickly screen and treat patients with straight-forward problems that likely could have been treated in an outpatient primary care setting.

Recently HMC opened an "Aftercare Clinic" to help increase discharges from the hospital and decrease ED utilization for follow-up care. The Aftercare Clinic afford a safety "check" for patients without primary care and who needed to be seen shortly after discharge, for such care as dressing changes, medication refills, and blood pressure management. Prior to the opening of the Aftercare Clinic, these patients were directed to the ED's Fast Track program for anything from glucose monitoring to dressing changes. Now clients can be seen at the Aftercare Clinic.

1811 Eastlake Project, King County

1811 Eastlake Project is the first housing program of its kind in Washington to use this innovative housing model for addressing the needs of chronic homeless alcoholics. The project provides supportive housing for 75 formerly homeless men and women living with chronic alcohol addiction. Residents benefit from 24-hour, seven day a week supportive services including:

- State – licensed mental health and chemical dependency treatment
- On-site health care services
- Daily meals and weekly outings to food banks
- Case management and payee services
- Medication monitoring
- Weekly community building activities

1811 Eastlake aims to improve the lives of its residents through reduced alcohol consumption, better health care and increased stability. It will also reduce residents' use of the community crisis response system, reduce public nuisance and encourage residents to undertake and follow through with alcohol treatment. Evaluation of the project will be performed by Drs. G. Alan Marlatt and Mary Larimer, nationally recognized experts in substance abuse research, and their team Addictive Behaviors Research Center of the University of Washington.

Similar projects are Anishinabe Wakiagun and The Glenwood, both in Minneapolis. Evaluation of these projects found a significant decrease in admission to detox centers and emergency departments.

Whatcom Alliance for Healthcare Access and St Joseph Hospital

The Whatcom Alliance for Healthcare Access (WAHA) and St Joseph Hospital (SJH) collaborated to reduce SJH's emergency department (ED) services for non-emergent care. Extensive data review and analysis, including client interviews, were performed. They found that 40% of the ED visits were "non-emergent" and that primarily they were young adults and children. Fifty percent of non-emergent visits were attributed to Medicaid or Uninsured clients. They also found that substance abuse and depressive disorders were the top diagnoses of Behavioral Health ED frequent users. Clients with chronic disease were also frequent ED users.

Based on their findings WAHA and SJH have replicated common elements, which include:

- Use ED point of contact to get people onto Medicaid
- Guide people into primary care through "social marketing"
- Increase same-day capacity at Community Health Centers
- Active interface between primary care services and ED
- Case management for frequent users

Emergency Department Care Coordination, Providence St Peter Hospital:
Project by CHOICE Regional Health Network

The Emergency Department Care Coordination Program (EDCCP) within St Peter's Hospital was developed and implemented in order to reduce inappropriate use of the ED; improve clients' health status; and increase the capacity and integration of safety net services. The program focuses on clients with a chronic medical problem, a need for care coordination, or has a care complaint, and is a high user of ED services. The ED physicians and staff screen clients for referral to the EDCCP based on specific criteria. Care management and the client's plan of care are coordinated between the program team, the client, CHOICE care manager, and the client's primary care provider (PCP). The Plan of Care is availably electronically for the ED physicians to ensure continuity of care.
Currently there are 142 enrolled in the program, with 52% on Medicaid and Medicaid/Medicare, 20% are self pay and 28% are other insurers. Latest study results have shown a 50% reduction in ED use and 40% reduction in ED charges.

ED Next Day Call Project

The project provides outbound calls to members with Group Health personal physicians at 5 clinics in Spokane and North Idaho (Coeur d'Alene). Calls are made the day after a patient visits an emergency room. Callers are nurses who work in health care centers and support clinical teams of physicians. A caller script focuses on whether a patient is recovering and needs a follow-up visit, and on assuring a patient knows their options for care when a sudden problem arises, their Medical Home.

Center for Medicare and Medicaid ED Diversion Grant

The Washington Association of Community & Migrant Health Centers (WACMHC) and the Washington State Hospital Association (WSHA) in collaboration with the Department of Social and Health Services (DSHS) has applied for a $2.0 million Center for Medicare and Medicaid Emergency Department Diversion grant. The grant would establish community health clinic pilots as alternative non-emergency service providers. The project will reduce ED utilization through three strategies:

- The availability of a 24 hour Nurse Triage Line
- Expanded office hours, including evenings and/or weekends
- The availability of case management services to follow up on Medicaid ED visits.

Findings

Emergency Departments (ED) are often seen as the pulse point of the health care delivery system. What is occurring in EDs detects problems with the health care safety net for vulnerable patients [10] Dependency on ED services increases as access to the traditional primary care services, as well as access to specialists, becomes more limited or constrained. Both national and state trends continue to show increase use of EDs across payers, with the majority of visits considered unnecessary - non-emergent and or preventable. Addressing and finding effective strategies and solutions to the increase use of unnecessary ED services are very complex. The UMP rates have stayed fairly constant (please see attachment A, tables 3, 4, 5)]. The following issues have been identified:

1. People tend to seek appropriate ED services for high intensity medical conditions, but have issues with distinguishing what is considered non-emergent or preventable. People believe that their health problems require immediate emergency attention.
2. The health care system has the inability to ensure access to primary care services. People have found it difficult accessing primary care service citing:
    a. Lack or difficulty in obtaining same day urgent appointments or even next day appointments.
    b. Primary care office hours are not available after work hours, evening or weekends.
    c. Lack of available primary care providers, particularly for Medicaid and self pay/uninsured patients.
3. The primary care delivery systems and health care payers need to understand how patients make decisions when they become ill and how they want health care delivered. Strategies developed must take into consideration race, ethnicity, culture, and education and be tailored for specific groups.
4. Other reasons that people use the ED instead of a primary health care service are: affirmative choice; available specialty care; convenience as EDs are open 24/7, 365 days a year including holidays; location; and “immediate” availability. A patient has to be seen and given a medical screening, as required by the Emergency Medical Treatment & Labor Act (EMTALA), even if the waiting time is long, the client will be seen.
5. There is a lack of communication and coordination efforts between the ED and primary care providers. There is a need to use technology, such as electronic medical records and the ability to share necessary health care information with treating providers on an interactive real time system. Inability of hospital EDs to electronically link to other EDs and share information on common patients diminishes their ability to enhance coordination and appropriate use of ED services.
6. The uninsured, homelessness, and chronic inebriates cannot afford out of pocket expense and are often turned away from primary care providers. This population increases their reliance on ED services for primary health care. Without a primary care provider, the patient must also rely on the ED for follow-up care after an ED or hospital discharge, for such services as dressing changes, medication refills, and glucose and blood pressure monitoring. These services can be provided in a less costly primary care setting.
7. It is important to determine long term health care consequences and the impact on different segments of the population with any strategies implemented to reduce ED

utilization. It is particularly important to determine how the health of low income and the chronically ill, who are high ED users, would be affected.

8. For HRSA clients, accountability for care coordination is weak: clients crossing multiple systems of care (e.g., mental health, DASA, fee-for-service or managed care) may have different care coordinators; but there is no identified lead responsible and accountable for overseeing and managing the clients' service plan.
9. Utilization data is fragmented between both public and private health care systems. There isn't a uniform method of collecting data among the various health care systems, which makes monitoring and evaluating ED usage difficult and inconsistent.
10. Many health care providers are not well-versed in the management of clients with challenging drug and alcohol or mental health problems and particularly those with co-occurring disorders. Many EDs do not have mental health and substance abuse specialists available on a 24 hours/7 days a week basis. And providers have expressed concerns regarding the availability of mental health and substance abuse community resources to assist ED clients on an immediate or timely basis. In addition, federal confidentiality rules governing drug and alcohol treatment stymies effective cross-agency and community communication for care planning purposes.
11. Inappropriate use of EDs and increase boarding of psychiatric patients is due to the lack of available Involuntary Treatment (ITA) certified beds.
12. Lack of access to sobering centers for intoxicated patients. Ambulances often take intoxicated patients to the ED, since there is no other placement for them.
13. The NYU model does not classify large numbers of visits. Significant among these are injuries, mental health related, alcohol related, and substance abuse related. Together these equal approximately 29%. Further discussion and additional review of populations representing these areas will be needed to develop strategies regarding appropriate alternative interventions not in ED.

Recommended Strategies

The second phase of Section 14 of ESSB 5930 is to develop pilot projects in partnership with community organizations and local health providers to develop reimbursement incentive strategies and design a demonstration pilot to reduce unnecessary ED visits. The following are strategies for consideration:

1. Create several models to coordinate care which could be tested in small pilots, including the use of "Best Practices". It is clear from the literature review that increased collaboration and communication between EDs and primary health care providers are essential in order to address the issue of EDs being the largest provider of primary care services. There are already a number of state and community projects addressing the issue of decreasing inappropriate ED use through the use of providing the link to primary care services; finding medical homes for patients; providing 24 hours Nurse Triage lines; and providing care management services. Sharing these best practice efforts with other communities can provide the necessary starting point in their efforts to effectively deal with ED utilization in their community.
2. Provide grants to community projects that would address appropriate ED usage specific to their community, including services for clients with mental health and substance abuse issues. Consideration of race, ethnicity, culture and educational levels of targeted groups must be an integral part of any strategy.
3. Provide Health Navigators to breakdown barriers for the uninsured and underserved population. The use of a Health Navigator who is part of the community and is sensitive to the ethnicity and culture needs of a group of clients can enhance access to care, identify barriers to health care services, and assist patients to use services appropriately. An important attribute of a Health Navigator is the ability to gain the trust and respect of the patient.
4. Further expand current ED initiatives that are proving successful.
5. Additional research is needed to determine why patients use the ED for primary care services, particularly around the issue of perception and the ability to distinguish low acuity conditions that don't require emergency care; incentives to change utilization behaviors; and what type of education strategies would be most effective in changing utilization behavior.
6. Explore changes in the health care system to improve access to primary care services, such as extended hours, including evening and weekend hours; telephone consultation, reward and incentives for provider.
7. Expand the use of the nurse advice line, including access to the service for Medicaid clients.
8. Pilot test in the pediatric population whether increasing the payment for primary care delivered after normal office hours is effective in reducing ED usage, in keeping with the Children's Healthcare Improvement System proposal. If effective, expand this strategy to other targeted groups.
9. Collaborate with the health care community, the Department of Health and prescribers to develop "best practices" to deal with the complex issues of clients with a dual diagnosis of mental health and substance abuse.
10. Explore the effectiveness of co-payments as a strategy to deter patients from unnecessary ED visits. A well-thought out co-payment strategy must take into consideration issues such as: patient being discouraged from seeking appropriate help when help is needed; the difficulty of collecting co-payments; long term health care consequences for patients who are deterred from the ED;

incentives and disincentives for both client and provider; and access to an alternative health care resource.

11. Further evaluation of current Regional Support Networks (RSN) and Designated Mental Health Professionals (DMHP) practices and protocols related to the use of EDs for ITA patients.

Attachment A
Uniform Medical Plan Data

The tables in this attachment describe detailed findings from the analyses of UMP ED data. Cost and utilization patterns overall and detailed analysis using the NYU model are presented below.

Tables 1 and 2 describe the cost and utilization for all medical services and ED services for the non-Medicare enrollees of Uniform Medical Plan (UMP). UMP experienced 20,053 ED visits for 133,778 members in 2006. UMP experienced a 75.6% growth in the number of member months between 2003 and 2006. In this same time frame, the cost for all services and ED services on a per member per month (PMPM) basis grew by substantially lower amounts of 14% and 10% respectively. It is important to note that the cost of ED services in these tables are rough estimates as the method of data extraction does not account for all possible ancillary charges associated with a particular ED visit. However, since the data extraction is consistent across years, one can see an accurate picture of the rate of growth.

Table 1. Uniform Medical Plan Counts for All Services and ED Services

Year	All Services			ED Services		
	$	Clients	Visits	$	Clients	Visits
2003	$280,894,746	96,912	98,743	$3,040,658	8,803	10,984
2004	$389,220,932	106,603	134,877	$4,392,063	12,735	16,195
2005	$481,545,340	117,264	146,663	$5,243,724	13,986	17,891
2006	$563,852,324	128,990	165,217	$5,889,345	15,392	20,053

Table 2. Uniform Medical Plan Per Member and Per User Costs for ED Services

Year	Members	Member Months	Per Member Per Month (PMPM)		Per User Per Month (PUPM)	
			All	ED	All	ED
2003	78,970	965,635	$290.89	$3.15	$2,898.45	$345.41
2004	110,934	1,378,896	$282.27	$3.19	$3,651.11	$344.88
2005	118,780	1,480,960	$325.16	$3.54	$4,106.51	$374.93
2006	133,778	1,695,548	$332.55	$3.47	$4,371.28	$382.62

Table 3 and 4 depict the cost and utilization of the NYU classifications of ED use as percentage of all medical services (Table 3) and of ED services (Table 4). Overall the cost for ED use accounts for 1% of all medical services expenditures and 12% for all medical service visits in 2006.

Injuries account for the largest percentage of emergency department cost and utilization from 2003 to 2006. When averaged over this time period, injuries account for approximately 3.8% of visits for all medical services and 32.3% of emergency department utilization. Injuries occurred more often among adults. Adult females (55.2%) incurred more injuries than men (44.8%) in 2006. Taken together, injuries and non-preventable emergent care visits accounted for 45.7% of emergency department visits in 2006.

Table 3. Uniform Medical Plan All ED and ED Classifications as Percentage of All Services

Year	As % of All Services														
	All ED			Nonemergent			Emergent, Primary Care Treatable			Emergent Care Needed, Preventable			Emergent Care Needed, Not Preventable		
	$	Clients	Visits	$	Clients	Visits	$	Clients	Visits	$	Clients	Visits	$	Clients	Visits
2003	1.1%	9.1%	11.1%	0.2%	1.7%	2.0%	0.2%	1.9%	2.3%	0.1%	0.5%	1.6%	0.2%	1.3%	1.6%
2004	1.1%	11.9%	12.0%	0.2%	2.2%	2.2%	0.2%	2.4%	2.4%	0.1%	0.6%	0.6%	0.2%	1.6%	1.7%
2005	1.1%	11.9%	12.2%	0.2%	2.2%	2.3%	0.2%	2.5%	2.6%	0.1%	0.6%	0.7%	0.2%	1.7%	1.7%
2006	1.0%	11.9%	12.1%	0.2%	2.2%	2.3%	0.2%	2.5%	2.5%	0.0%	0.6%	0.6%	0.1%	1.7%	1.7%

Table 3 (continued)

Year	As % of All Services														
	Injury			Psychiatric			Alcohol			Drugs			Unclassified		
	$	Clients	Visits	$	Clients	Visits	$	Clients	Visits	$	Clients	Visits	$	Clients	Visits
2003	0.3%	3.4%	3.6%	0.0%	0.2%	0.2%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.1%	0.7%	0.7%
2004	0.3%	4.7%	4.0%	0.0%	0.3%	0.3%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.1%	0.9%	0.8%
2005	0.3%	4.4%	3.8%	0.0%	0.2%	0.2%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.1%	0.9%	0.8%
2006	0.3%	4.5%	3.8%	0.0%	0.3%	0.2%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.1%	1.1%	0.9%

Emergent care that is treatable by a primary care physician is the second largest percentage of utilization, followed by non-emergent care, non-preventable emergent care, and preventable emergent care. When taken together, non-emergent care, emergent care treatable by a primary care physician, and preventable emergent care account for 5.4% of all medical services visits in 2006. Similarly, these three categories make up 44.3% of emergency department visits in 2006. Psychiatric, alcohol and drug related visits to the emergency department account for a negligible percentage of both volume and cost of medical services.

Table 4. Uniform Medical Plan ED classifications as Percentage of ED Services

Year	Visits As % of ED Services									
	NE	EPCT	EP	ENP	Injury	Psych	Alcohol	Drugs	UC	Total
2003	18.3%	20.6%	5.1%	14.6%	32.5%	1.7%	0.6%	0.1%	6.5%	100.0%
2004	18.2%	20.0%	5.1%	13.8%	33.6%	2.3%	0.6%	0.1%	6.4%	100.0%
2005	18.7%	21.1%	5.4%	14.3%	31.4%	1.8%	0.6%	0.1%	6.5%	100.0%
2006	18.7%	20.8%	4.7%	14.0%	31.7%	1.9%	0.5%	0.1%	7.5%	100.0%

Table 5 shows the number of visits to the ED by NYU classification per 100 members. UMP had 14.19 visits per 100 in 2006, and this figure has increased only slightly from 2003. When compared to the 2005 national rate for privately insured persons (23.8 per 100), UMP had substantially fewer ED visits per capita.

When examining the rate of growth in visits per 100 members from 2003 through 2006 using the NYU model categories, non-emergent care visits increased by 6.2%, emergent care visits treatable by a primary care physician increased by 5%, preventable emergent care visits increased by 3.3%, and non-preventable emergent care visits increased by 0.2%. Emergency department utilization classified as injuries have remained relatively stable with an increase of only 1.5%.

Table 5. Uniform Medical Plan Visits per 100 members for all ED and ED Classifications

Visits Per 100 Members									
Year	**All ED**	**NE**	**EPCT**	**EP**	**ENP**	**Injury**	**Psych**	**Alcohol**	**Drugs**
2003	13.65	2.50	2.82	0.70	1.99	4.43	0.24	0.08	0.01
2004	14.09	2.56	2.82	0.72	1.94	4.73	0.33	0.08	0.02
2005	14.50	2.72	3.07	0.78	2.07	4.55	0.26	0.09	0.02
2006	14.19	2.66	2.96	0.67	1.99	4.50	0.27	0.07	0.02

Table 6 depicts ED services cost and utilization by age group from 2003 to 2006. Not unexpectedly, the majority (~75%) of cost and visits are incurred by those in the adult (18-64) category, followed by children (~21%) and elderly (~3%). These percentages appear to be stable over time. When examined relative to enrollment, children account for a higher proportion of emergency department visits than the other age groups.

Table 6. Uniform Medical Plan ED Cost and Utilization by Age Group

		Count of ED Services			**% of ED Services**			
Year	**Age Group**	**$**	**Clients**	**Claims**	**$**	**Clients**	**Claims**	**% of Enrollment**
2003	Children 0-17	$532,437	1,861	2,234	17.5%	21.1%	20.3%	18.2%
	Adult 18-64	$2,389,709	6,654	8,372	78.6%	75.5%	76.2%	78.9%
	Elders 65+	$118,512	297	378	3.9%	3.4%	3.4%	2.9%
	Total	**$3,040,658**	**8,812**	**10,984**				
2004	Children 0-17	$885,861	2,948	3,546	20.2%	23.1%	21.9%	20.0%
	Adult 18-64	$3,375,654	9,458	12,211	76.9%	74.2%	75.4%	77.4%
	Elders 65+	$130,547	345	438	3.0%	2.7%	2.7%	2.6%
	Total	**$4,392,063**	**12,751**	**16,195**				
2005	Children 0-17	$1,002,740	2,993	3,654	19.1%	21.3%	20.4%	20.0%
	Adult 18-64	$4,071,751	10,625	13,703	77.6%	75.7%	76.6%	77.3%
	Elders 65+	$169,233	418	534	3.2%	3.0%	3.0%	2.7%
	Total	**$5,243,724**	**14,036**	**17,891**				
2006	Children 0-17	$1,273,614	3,651	4,586	21.6%	23.3%	22.9%	21.1%
	Adult 18-64	$4,416,891	11,554	14,858	75.0%	73.7%	74.1%	76.3%
	Elders 65+	$198,840	474	609	3.4%	3.0%	3.0%	2.7%
	Total	**$5,889,345**	**15,679**	**20,053**				

Table 7 shows the top 20 diagnoses by utilization and their associated costs and primary and secondary NYU classifications. The top 20 diagnoses account for 90.3% of all emergency department visits. When examined by only the primary NYU model classification, injuries and non-preventable emergent care account for 38% of the visits; while non-emergent, emergent care treatable through primary care, and preventable emergent care account for 62% of the visits.

Further analysis of the top twenty diagnoses suggests that approximately 13% (n=2356) of the top twenty diagnoses consist of typical childhood infections (urinary tract infection, acute pharyngitis, and inner ear infection). A substantial portion (41.7%) of the visits for these three conditions occurs on Saturday and Sunday. This finding suggests that families may lack adequate access to primary care, lack of sufficient health education, are not willing to take the risks of a "wait and see" approach, or some combination of these factors. Further exploration may be warranted as these three diagnoses represent 12% of all emergency department visits.

Table 7. Uniform Medical Plan Top 20 Diagnoses by Visit Volume

Rank	ICD-9 Code	Description	Number of Visits	Number of Clients	Total Payment	Primary Classification & Proportion		Second Classification & Proportion	
1	786.50	CHEST PAIN NOS	1875	1820	$730,273	ENP	(0.68)	EPCT	(0.32)
2	883.0	OPEN WOUND OF FINGER	1456	1442	$276,789	Injury	(1.00)	n/a	
3	786.59	CHEST PAIN NEC	1332	1306	$529,775	EP	(0.61)	ENP	(0.39)
4	789.00	ABDOM PAIN NOS SITE	1232	1157	$412,600	EPCT	(0.67)	ENP	(0.33)
5	784.0	HEADACHE	1173	1061	$380,121	NE	(0.78)	ENP	(0.12)
6	599.0	URIN TRACT INFECTION NOS	993	968	$247,744	NE	(0.46)	EPCT	(0.30)
7	845.00	SPRAIN OF ANKLE NOS	885	873	$200,678	Injury	(1.00)	n/a	
8	346.90	MIGRAINE NOS/NOT INTRCBL	815	628	$306,935	NE	(0.78)	ENP	(0.13)
9	558.9	NONINF GASTROENTERIT NEC	807	790	$278,598	NE	(0.46)	EPCT	(0.37)
10	780.6	PYREXIA UNKNOWN ORIGIN	805	786	$246,502	NE	(0.43)	EPCT	(0.37)
11	780.2	SYNCOPE AND COLLAPSE	790	774	$293,305	ENP	(0.67)	EPCT	(0.33)
12	462.0	ACUTE PHARYNGITIS	764	758	$163,147	NE	(0.66)	EPCT	(0.28)
13	789.09	ABD PAIN NEC/MULTI SITE	759	725	$265,665	EPCT	(0.67)	ENP	(0.33)
14	847.0	SPRAIN OF NECK	751	735	$176,904	Injury	(1.00)	n/a	
15	465.9	ACUTE URI NOS	676	663	$151,675	EPCT	(0.82)	EP	(0.18)
16	873.42	OPEN WOUND OF FOREHEAD	618	609	$133,403	Injury	(1.00)	n/a	
17	729.5	PAIN IN LIMB	612	601	$160,640	NE	(0.71)	EPCT	(0.17)
18	382.9	OTITIS MEDIA NOS	599	586	$120,194	EPCT	(0.59)	NE	(0.37)
19	780.4	DIZZINESS AND GIDDINESS	586	578	$198,200	NE	(0.72)	EPCT	(0.20)
20	847.2	SPRAIN LUMBAR REGION	572	532	$126,281	Injury	(1.00)	n/a	

ED Classifications: Nonemergent (NE), Emergent Primary Care Treatable (EPCT), Emergent Care Needed Preventable (EP), Emergent Care Needed Not Preventable (ENP), Injury, Psychiatric, Alcohol, Drugs, Unclassified

Additionally, 25% (n=4591) of the diagnoses are related in some way to pain (excluding chest pain and sprains). These visits account for nearly 23% of all visits to the emergency department among UMP enrollees from 2003 to 2006. Acknowledging that there are very legitimate reasons to present to the emergency department for pain, this finding could present an indication of drug-seeking behavior. [67, 68, 69] However, drug-seeking behavior would also be accompanied by a high frequency of visits to the emergency department. Upon further investigation, the 2006 data showed that 94.3% of enrollees who accessed the emergency department for care had only 1 or 2 visits. This finding would allow one to conclude with reasonable certainty that UMP enrollees do not present this problem.

Attachment B
Basic Health Plan Data

The tables in this attachment describe detailed findings from the analysis of BHP ED data. Cost and utilization patterns overall and detailed analysis using the NYU model are presented below.

Tables 1 and 2 show the emergency department utilization and enrollment figures for the 2006 Basic Health Plan (BHP) carriers (except for Columbia United Providers). BHP plans experienced 37,192 emergency department visits for 97,326 members. This is a considerably higher rate than experienced by UMP.

Table 1. Basic Health Plan Counts for ED Services

Year	ED Services		
	$	Clients	Visits
2006	$31,315,463	17,013	37,185

Table 2. Basic Health Plan Per Member and Per User Costs for ED Services

Year	Average Members	Member Months	Per Member Per Month (PMPM)	Per User Per Month (PUPM)
2006	97,326	1,167,913	$26.81	$1,840.68

Table 3 depicts the NYU classifications of ED use as percentages of ED services. Emergent care that is treatable by a primary care physician account for the largest percentage of ED utilization (23.8%), followed by injuries (22.4%), non-emergent care (21.1%), non-preventable emergent care (15.4%), and preventable emergent care (5.4%). This distribution is not dramatically dissimilar from UMP.

Table 3. Basic Health Plan ED Classifications as Percentage of ED Services

Year	Visits As % of ED Services									
	NE	EPCT	EP	ENP	Injury	Psych	Alcohol	Drugs	UC	Total
2006	21.1%	23.8%	5.4%	15.4%	22.4%	2.3%	1.0%	0.2%	8.3%	100.0%

ED Classifications: Nonemergent (NE), Emergent Primary Care Treatable (EPCT), Emergent Care Needed Preventable (EP), Emergent Care Needed Not Preventable (ENP), Injury, Psychiatric, Alcohol, Drugs, Unclassified

When taken together, injuries and non-preventable emergencies accounted for 37.8% of ED visits in 2006. Non-emergent care, emergent care that is treatable by a primary care physician, and preventable emergent care account for 50.3% of ED visits. There appear to be meaningful differences in these groupings when compared to the UMP population. Psychiatric, alcohol- and drug-related (primary diagnoses) visits to the ED account for a negligible percentage of volume of medical services.

Table 4 shows the number of visits to the ED by NYU classification per 100 members. The overall rate of ED use is 38.21 per 100 members and the range among the BHP plans was 29.66 to 57.62 per 100, demonstrating wide variability among health plans.

This rate is considerably higher than the 2005 national rate for privately insured persons (23.8 per 100); however, it is also substantially lower than the national Medicaid rate (89.4 per 100). BHP does not have an appropriate benchmark for comparison because it is neither truly commercial nor Medicaid, but the reader can get a sense of the ED utilization relative to enrollment.

Table 4. Basic Health Plan Visits per 100 Members for all ED and ED Classifications

Visits Per 100 Members									
Year	**All ER**	**NE**	**EPCT**	**EP**	**ENP**	**Injury**	**Psych**	**Alcohol**	**Drugs**
2006	38.21	8.06	9.11	2.06	5.89	8.55	0.90	0.38	0.08

ED Classifications: Nonemergent (NE), Emergent Primary Care Treatable (EPCT), Emergent Care Needed Preventable (EP), Emergent Care Needed Not Preventable (ENP), Injury, Psychiatric, Alcohol, Drugs, Unclassified

Table 5 illustrates emergency department services cost and utilization by age group. Not unexpectedly, the majority (84.8%) of visits are incurred by those in the adult (18-64) category, followed by children (13.8%) and elders (1.4%). When examined relative to enrollment, visits among children are slightly overrepresented and visits among adults are underrepresented.

Table 5. Basic Health Plan ED Cost and Utilization by Age Group

		Count of ED Services			% of ED Services			
Year	**Age Group**	**$**	**Clients**	**Claims**	**$**	**Clients**	**Claims**	**% of Enrollment**
2006	Children 0-17	$3,614,823	3,362	5,147	11.5%	19.8%	13.8%	10.0%
	Adult 18-64	$26,922,800	13,387	31,529	86.0%	78.7%	84.8%	88.8%
	Elders 65+	$777,839	264	516	2.5%	1.6%	1.4%	1.2%
	Total	**$31,315,463**	**17,013**	**37,192**				

Table 6 shows the top twenty diagnoses by utilization and their associated costs and primary and secondary NYU classifications. The top 20 diagnoses account for 30.3% of all emergency department visits, suggesting that there is more variation in primary diagnoses among BHP enrollees than UMP enrollees. When examined by only the primary NYU model classification, injuries and non-preventable emergent care account for 22% of the visits; while non-emergent, emergent care treatable through primary care, and preventable emergent care account for 78% of the visits.

Further analysis of the top twenty diagnoses suggests that 12% (n=1343) of the top twenty diagnoses consist of typical childhood infections (urinary tract infection, acute pharyngitis, and inner ear infection). This finding suggests that families may lack adequate access to primary care, lack of sufficient health education, are not willing to take the risks of a “wait and see” approach, or some combination of these factors. Further exploration may be warranted; however, these three diagnoses represent less than 4% of all emergency department visits and efforts directed toward interventions may not be an efficient use of resources.

Table 6. Basic Health Plan Top 20 Diagnoses by Visit Volume

Rank	ICD-9 Code	Description	Number of Visits	Number of Clients	Total Payment	Primary Classification & Proportion		Second Classification & Proportion	
1	786.50	CHEST PAIN NOS	1283	813	$1,172,056	ENP	(0.68)	EPCT	(0.32)
2	789.00	ABDOM PAIN NOS SITE	1139	785	$1,186,521	EPCT	(0.67)	ENP	(0.33)
3	784.0	HEADACHE	1082	610	$962,995	NE	(0.78)	ENP	(0.12)
4	789.09	ABD PAIN NEC/MULTI SITE	693	488	$792,209	EPCT	(0.67)	ENP	(0.33)
5	786.59	CHEST PAIN NEC	692	508	$1,288,437	EP	(0.61)	ENP	(0.39)
6	346.90	MIGRAINE NOS/NOT INTRCBL	533	233	$322,873	NE	(0.78)	ENP	(0.13)
7	724.2	LUMBAGO	523	305	$251,891	NE	(0.74)	EPCT	(0.15)
8	599.0	URIN TRACT INFECTION NOS	497	401	$358,235	NE	(0.46)	EPCT	(0.30)
9	462	ACUTE PHARYNGITIS	443	340	$168,894	NE	(0.66)	EPCT	(0.28)
10	558.9	NONINF GASTROENTERIT NEC	439	368	$448,561	NE	(0.46)	EPCT	(0.37)
11	883.0	OPEN WOUND OF FINGER	435	330	$189,077	Injury	(1.00)	n/a	
12	789.06	ABDOMINAL PAIN, EPIGASTRIC	430	306	$482,041	EPCT	(0.67)	ENP	(0.33)
13	465.9	ACUTE URI NOS	429	351	$181,189	EPCT	(0.82)	EP	(0.18)
14	847.0	SPRAIN OF NECK	414	285	$317,440	Injury	(1.00)	n/a	
15	382.9	OTITIS MEDIA NOS	403	315	$133,305	EPCT	(0.59)	NE	(0.37)
16	780.6	PYREXIA UNKNOWN ORIGIN	399	318	$247,920	NE	(0.43)	EPCT	(0.37)
17	780.4	DIZZINESS AND GIDDINESS	367	253	$287,614	NE	(0.72)	EPCT	(0.20)
18	729.5	PAIN IN LIMB	361	263	$161,437	NE	(0.71)	EPCT	(0.17)
19	786.52	PAINFUL RESPIRATION	355	277	$352,631	EPCT	(0.82)	ENP	(0.18)
20	847.2	SPRAIN LUMBAR REGION	340	219	$135,326	Injury	(1.00)	n/a	

ED Classifications: Nonemergent (NE), Emergent Primary Care Treatable (EPCT), Emergent Care Needed Preventable (EP), Emergent Care Needed Not Preventable (ENP), Injury, Psychiatric, Alcohol, Drugs, Unclassified

Additionally, approximately 42% (n=4761) of the top twenty diagnoses are related in some way to pain (excluding chest pain and sprains). These visits account for nearly 13% of all visits to the emergency department among BHP enrollees in 2006. Acknowledging that there are very legitimate reasons to access the emergency department for pain, this finding could present an indication of drug-seeking behavior.[67, 68, 69] However, drug-seeking behavior would also be accompanied by a high frequency of visits to the emergency department. Upon further investigation, the 2006 data showed that 76% of enrollees who accessed the emergency department for care had only 1 or 2 visits, 18.7% had 3 to 5 visits, and 4% had 6 to 10 visits. Taken together, these findings may warrant further exploration.

Attachment C
Medicaid Fee-for-Service and Managed Care Data

The tables in this attachment describe findings from the analysis of Medicaid ED data. Top 20 diagnoses ranked by number of visits is displayed below.

Table 1 and 2 shows the top twenty diagnoses by utilization for fee-for-service and managed care members. Further analysis of the top twenty diagnoses suggests that the top 3 diagnoses consist of urinary respiratory infection, back pain and headache infection for fee-for-service clients and fever, upper respiratory infection and abdominal pain, unspecified for managed care enrollees.

Table 1

Washington State Medicaid Fee-For-Service Population
CY 2006 Emergency Room Utilization by Top 20 Diagnoses
Rank by Number of Visits

Rank	ICD-9 Code	Description	Number of Clients	Number of Visits
1	465.9	ACUTE URI NOS	5,805	6,288
2	784.0	HEADACHE	4,068	6,000
3	724.2	LUMBAGO	3,611	5,216
4	789.00	ABDOMINAL PAIN, UNSPECIFIED SITE	3,851	5,022
5	382.9	OTITIS MEDIA NOS	4,322	4,797
6	648.93	OTH CURR COND-ANTEPARTUM	3,784	4,640
7	525.9	DENTAL DISORDER NOS	3,336	4,269
8	346.90	MIGRAINE, UNSPECIFIED W/O INTRACTABLE MI	2,100	4,139
9	847.2	SPRAIN LUMBAR REGION	3,065	3,858
10	599.0	URIN TRACT INFECTION NOS	3,040	3,435
11	786.50	CHEST PAIN NOS	2,701	3,305
12	789.09	ABDOMINAL PAIN, OTHER SPECIFIED SITE	2,723	3,271
13	462	ACUTE PHARYNGITIS	3,043	3,229
14	466.0	ACUTE BRONCHITIS	2,885	3,148
15	786.59	CHEST PAIN NEC	2,518	3,058
16	522.5	PERIAPICAL ABSCESS	2,551	2,998
17	780.39	OTHER CONVULSIONS	1,811	2,945
18	780.6	FEVER	2,757	2,934
19	558.9	NONINF GASTROENTERIT NEC	2,606	2,778
20	729.5	PAIN IN LIMB	2,229	2,707

Table 2

CY 2006 Top 20 ER Diagnoses by Medicaid Managed Care Plans

Rank	ICD-9 Code	Description
1	780.6	FEVER
2	465.9	ACUTE URI NOS
3	789.00	ABDOMINAL PAIN, UNSPECIFIED SITE
4	382.9	OTITIS MEDIA NOS
5	784.0	HEADACHE
6	787.03	VOMITING ALONE
7	462	ACUTE PHARYNGITIS
8	558.9	NONINF GASTROENTERIT NEC
9	786.2	COUGH
10	789.09	ABDOMINAL PAIN, OTHER SPECIFIED SITE
11	786.50	CHEST PAIN NOS
12	079.99	UNSPECIFIED VIRAL INFECTIONS
13	599.0	URIN TRACT INFECTION NOS
14	920	CONTUSION FACE/SCALP/NCK
15	525.9	DENTAL DISORDER NOS
16	486	PNEUMONIA, ORGANISM NOS
17	845.00	SPRAIN OF ANKLE NOS
18	466.0	ACUTE BRONCHITIS
19	729.5	PAIN IN LIMB
20	034.0	STREP SORE THROAT

Attachment D
Washington State Hospital Association Data

The content of this attachment describe detailed findings from the analysis of Washington State Hospital Association (WSHA) data representing a sample of 23 Washington State hospitals. Additionally, the WSHA surveyed a small number of hospitals to gain an understanding of issues of concern among these organizations. Findings from this review are described below.

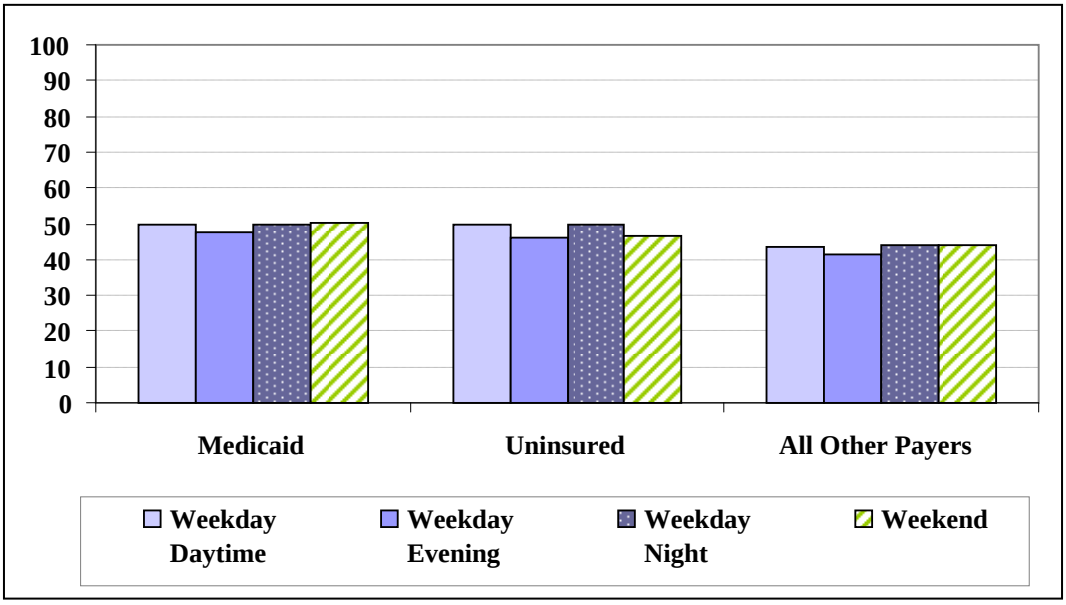
WSHA surveyed five metropolitan hospitals' ED managers as well as one critical access hospital to gain an understanding of the communities the hospitals serve. The five metropolitan hospitals continue to find it challenging to keep up with the demand of services as they respond to over-crowding issues. A major issue that each of these five hospitals face is the boarding of psychiatric patients in the ED. There is a lack of available involuntary treatment (ITA) certified beds. Even with improvements in place, restructuring and process improvements, significant resources are being spent on this population. Hospital EDs are also considered the safety net for their communities in handling intoxicated patients. These patients could be handled in a less costly and more efficient outpatient entity.

ED Visits Do Not Cluster by Time of Day

One would anticipate hospitals see more non-emergent cases during off hours, evenings and weekends. Consistent with the state's methodology, this chart combines all ED visits assigned to one of the three NYU "non-emergent" categories of care: non-emergent, emergent but primary care treatable, and emergent but avoidable with better primary care. It does not appear that visits classified as non-emergent cluster during any one time of day. No one time/day category emerges as having the heaviest volume, regardless of payer group.

Table 1

ED Use for Non-Emergent Cases by Time of Day and Day of Week, by Payer
Percent of Non-emergent Visits during a Time Period

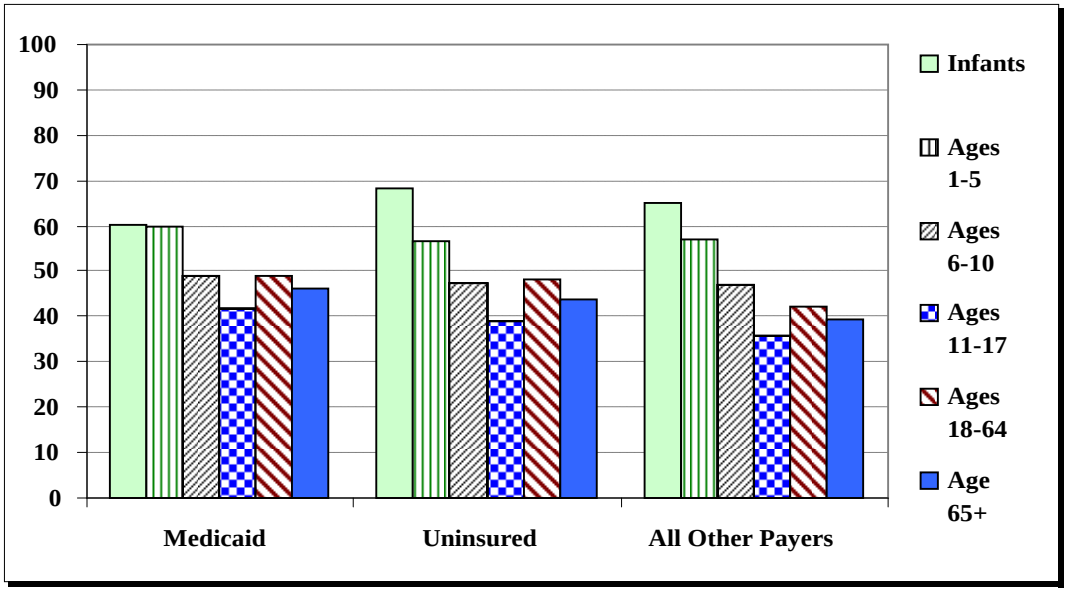


ED for Non-Emergent Care Is Most Common among Children under One Year

Table 2 examines non-emergent ED use by age. It also combines all ED visits assigned to one of the three NYU "non-emergent" categories of care: non-emergent, emergent but primary care treatable, and emergent but avoidable with better primary care. It shows the highest use in these types of ED visits by children under one year old. The age distribution of patients is nearly identical for the Medicaid, uninsured, and "all other payer" group.

Table 2

Percent of Total ED Use By Age and Payer



Top 20 Diagnoses for Uninsured Largely Determined By Lack of Primary Care Access

Table 3 examines ER use by diagnosis for uninsured. WSHA found a high degree of similarity across payers, but dental disorders and general medical exam not specified occurred with the Medicaid and uninsured population and not with the commercial group.

Table 3

Top 20 Diagnoses for Uninsured Cases Included in Non-Emergent Categories *

Payer	Primary Diagnosis Code	Diagnosis Description	Estimated Frequency -Visits Deemed "Non-Emergent" *	Average Charge per Visit **
Uninsured	5259	Dental disorder	1,325	$456
Uninsured	6826	Cellulitis (wound infection), leg	1,240	$3,032
Uninsured	5225	Periapical (tooth root) abscess	1,132	$716
Uninsured	7242	Low back pain	1,110	$1,049
Uninsured	7840	Headache, unknown cause	1,101	$1,837
Uninsured	5990	Urinary tract infection	1,094	$1,485
Uninsured	4659	Acute upper respiratory infection	1,057	$669
Uninsured	462	Acute pharyngitis (throat inflammation, infection)	1,049	$772
Uninsured	V709	General medical exam	1,022	$151

Uninsured	78900	Abdominal pain, unspecified site	956	$2,669
Uninsured	6823	Cellulitis (wound infection), arm	851	$2,743
Uninsured	5589	Noninfectious gastroenteritis	796	$2,162
Uninsured	3829	Otitis media (middle ear inflammation)	766	$493
Uninsured	4660	Acute bronchitis	736	$1,147
Uninsured	49392	Asthma	643	$1,889
Uninsured	34690	Migraine	620	$1,264
Uninsured	490	Bronchitis	608	$1,012
Uninsured	486	Pneumonia, organism unspecified	578	$3,741
Uninsured	78039	Convulsions	561	$2,823
Uninsured	78659	Chest pain	552	$4,807

Uninsured		*Top 20 Subtotal*	*17,797*	
Uninsured		**Grand Total**	**42,025**	**$2,821**

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